

Data Sheet B7703, Pb-Free





B7703

### **Low-Loss Filter for Mobile Communication**

836,5 MHz

**Data Sheet** 



#### **Features**

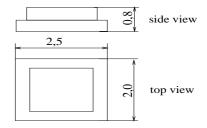
- Low-loss RF filter for mobile telephone AMPS systems, transmit path
- Low amplitude ripple
- Usable passband 25 MHz
- Package for Surface Mounted Technology (SMT)
- Pb-Free

#### **Terminals**

■ Gold-plated Ni

# 0,1 1 2 bottom view 4 3 0,7

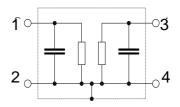
Chip Sized SAW Package DCS4H



Dimensions in mm, approx. weight 0,015 g

### Pin configuration

1 Input 3 Output 2, 4 Ground



Туре	Ordering code	Marking and Package according to	Packing according to		
B7703	B39841-B7703-K710	C61157-A7-A136	F61074-V8189-Z000		

Electrostatic Sensitive Device (ESD)

# **Maximum ratings**

Operating temperature range	T	- 30/+ 85	°C	
Storage temperature range	$T_{\rm stg}$	<b>- 40/+ 85</b>	°C	
DC voltage	$V_{\rm DC}$	5	V	
ESD	$V_{ESD}$	100*	V	Machine Model, 10 pulses
Input Power max.	$P_{IN}$	15	dBm	source impedance 50 $\Omega$

 $<sup>^{\</sup>star}$  acc. to JESD22-A115A (Machine Model), 10 negative & 10 positive pulses



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#### **Characteristics**

Operating temperature range:

 $T = -30 \text{ to } +85 \degree \text{C}$   $Z_S = 50 \Omega$   $Z_L = 50 \Omega$ Terminating source impedance: Terminating load impedance:

		min.	typ.	max.	
Center frequency	$f_{\mathbb{C}}$	_	836,5	_	MHz
Maximum insertion attenuation 824,0 849,0	α <sub>max</sub> MHz	_	2,5	2,8	dB
<b>Amplitude ripple</b> (p-p) 824,0 849,0 M	Δα MHz	_	0,9	1,3	dB
<b>Return loss</b> 824,0 849,0 M	MHz	_	12,0	10,0	dB
Attenuation	α				
0,0 790,0	MHz	45,0	56,0	_	dB
790,0 810,0 M	MHz	30,0	35,0	_	dB
869,0 894,0 M	MHz	26,0	29,0	_	dB
894,0 914,0 N	MHz	30,0	40,0	_	dB
914,02000,0	MHz	45,0	50,0	_	dB
2000,03000,0 N	MHz	35,0	40,0	_	dB
,-	MHz	30,0	35,0	_	dB
3500,04000,0 N	MHz	20,0	25,0	_	dB
4000,06000,0 N	MHz	10,0	18,0	_	dB
Rx band suppression	α				
869,0 894,0 M	MHz	26,0	29,0	_	dB



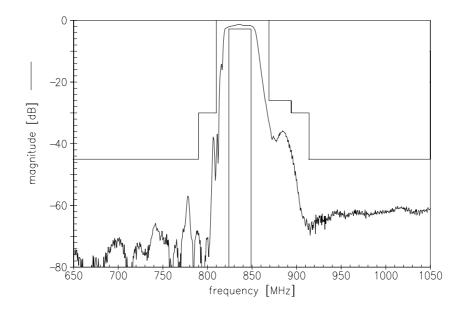
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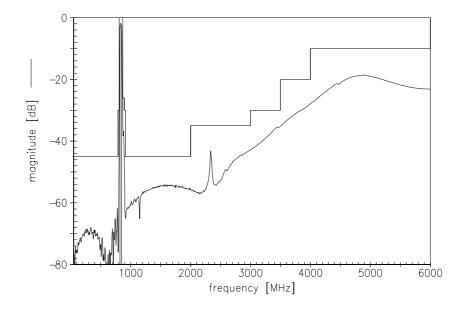
**Data Sheet** 



#### **Transfer function**



# Transfer function (wideband)





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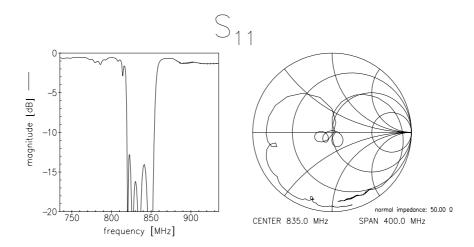
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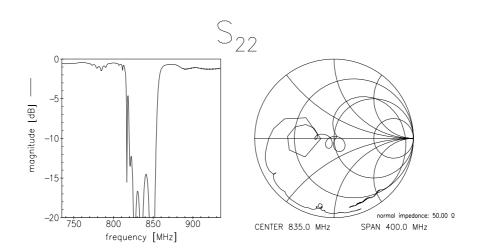
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#### **Reflection functions**







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